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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/585,533

07/10/2006

Tadahiro Yokozawa

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EXAMINER

LAM, CATHY FONG FONG

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

01/21/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/585,533	Applicant(s) YOKOZAWA ET AL.	
	Examiner Cathy Lam	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7-10-06, 8-1-06, 7-24-07</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Applicant is reminded that it is the product itself which must be new and unobvious, see *In re Pinkington* 162 USPQ 145, 147 (C.C.P.A. 1969). Product by process claimed are not patentably distinct over product claims unless it can be shown that the product produced by the process is in some manner measurably distinct from the product produced by another process, therefore there will be no weight given to the product by process verses product claims.

Claim Rejections - 35 USC § 112

1. Claims 1, 4, 5, 7 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1 and 7, "the surface" lacks antecedent basis.

In claims 4 and 7, the phrase "the initial peel strength" lacks antecedent basis.

Claim 5 involves many processing steps, it is however structurally indefinite.

In claim 8, phrases like "the surface" and "the pattern forming sections" lack antecedent basis.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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3. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamaguchi et al (US 6129982).

Yamaguchi teaches a heat resistant polyimide/metal composite sheet comprised of an aromatic polyimide film, a metal or a metal oxide layer (Figs 1 & 2).

The composite sheet is composed of an aromatic polyimide film (12), a metal or a metal oxide layer (13) provided onto the polyimide film (12) surface.

Another embodiment of Yamaguchi's composite sheet is composed of a polyimide film (32), a metal or metal oxide layer (33a,33b) and a metal film (36a, 36b) respectively on both surfaces of the polyimide film (32) (col 2 L 43-49 & Fig. 3).

The metal or metal oxide layer can be an aluminum or its oxide (col 5 L 6-8). The metal film 36) is preferably a copper film (col 5 L 15-16).

4. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Aida (US 6767644).

Aida teaches a metallized polyimide film comprised of a polyimide film (1), an intermediate layer (2) and a conductive metal layer (4); all in the named order.

The intermediate layer (2) can be a silicon or silicon monoxide, which it used to enhance bond strength between the conductive metal layer (4) and the polyimide film (1) (col 2 L 56-58).

The conductive metal layer (4) can be more than one layer; it can be a copper or a copper alloy (col 5 L50).

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5. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Swisher (US 5364707).

Swisher teaches a flexible metal film laminate comprised of a metal oxide film, two metal layers and a polyimide substrate.

The polyimide substrate is first plasma treated to form a metal oxide film, then two metal layers are subsequently formed over the metal oxide film (col 4 L 15-24). the metal oxide film can be an aluminum oxide (col 5 L 43-45) The two metal layers are preferably copper (col 8 L 10-12, col 10 L 54-57 and col 11 L 4-20).

The three prior art all teach the materials and the structure of the present invention. The prior art however are silent about the initial peel strength value and the peel strength value after the aging treatment.

However, since the materials were the same as the present invention, the examiner is taking the position that the prior art polyimide-metal laminate possess the same peel strength values.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cathy Lam whose telephone number is (571) 272-1538. The examiner can normally be reached on 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Cathy Lam/
Primary Examiner, Art Unit 1794